



Technology and Education:

Assistance and Advancement for K-12 Schools

Submitted in Accordance with C.G.S. 4d-83

State of Connecticut Department of Information Technology
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Introduction

C.G.S. 4d-83 requires the Department of Information Technology (DOIT) to report annually on assistance to *“local and regional boards of education and regional vocational-technical schools to expand their educational technology capabilities, including, but not limited to, wiring, Internet connectivity and technical support, and (2) opportunities for such boards of education and schools to purchase under state-wide contracts.”*

DOIT’s main area of assistance activities to K-12 educational institutions are

- 1) Deployment and support of the Connecticut Education Network*
- 2) Working with the Commission for Educational Technology to further statewide educational technology goals; and*
- 3) Negotiating and offering contracts off of which K-12 and other educational institutions can purchase.*

In addition, DOIT launched a cyber-safety awareness program in 2005.

We are pleased to submit this report in accordance with this requirement and detail agency efforts in these vital areas.

Highlights - 2005

Deployment and Support of the Connecticut Education Network

- Deployment of the Connecticut Education Network (CEN) was completed in the fall of 2005. CEN now reaches into each of the state's 169 cities and towns, including 215 K-12 districts, 47 college and university campuses, and 31 libraries.
- During 2005, the amount of active CEN connections increased by 300 percent and usage of CEN increased by nearly 400 percent. Staffing for CEN support and maintenance doubled to accommodate these increases.
- For the third consecutive year, support was secured from the federal Universal Service Fund (USF) "e-rate" program for significantly discounted telecommunication service rates. These discounts will enable the State to save over \$5.5 million this year alone in CEN operating costs, and also enable the State to continue payments on its long term long-term investment in the network.

Development of Online Content and Resources

- DOIT supported the launch of a new CEN Home page for users – www.cen.ct.gov. Under the direction of and in partnership with the Commission for Educational Technology, DOIT is helping accelerate the development of online content and resources with the planned hiring of a new CEN Content Manager.

Online Safety and Security Awareness

- DOIT launched www.ct.gov/cybersafe in response to the need for online safety awareness. The site, also linked to from www.cen.ct.gov, prominently features resources for parents, teachers and students to help them learn how to stay safe online.

Contracts

- DOIT continues to offer more than 25 contracts off of which educational institutions can purchase, enabling them to enjoy discounts on technology hardware, software and services.

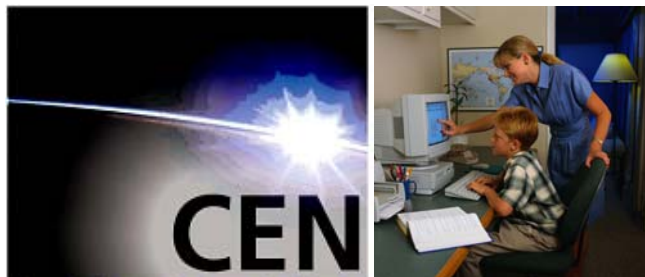
Connecticut Education Network

About the Connecticut Education Network (CEN)

In 2005, CEN deployment was completed. CEN connections are now in place in all of Connecticut's 169 cities and towns.

It is the nation's first all-optical network linking K-12 public schools, public and private higher education campuses and library locations throughout Connecticut.

CEN operates at speeds one thousand times faster than a home broadband connection. CEN benefits for schools includes no-to-low cost internet connection, and access to a wide variety of national and international education resources including the next generation Internet2.



Knowledge at the Speed of Light

Activities in 2005

In 2005, the amount of active CEN connections tripled. Connections were placed in:

- 108 Additional K-12 Districts
- 14 Additional Higher Education Facilities
- 19 Additional Libraries

During 2005, usage of the CEN increased by nearly 400 percent.

Network technicians detailed to CEN doubled from three to six.

DOIT responded to more than 600 service calls from municipalities, libraries and school districts, including:

- Questions and assistance on customizing internet filtering
- Requests for network design and configuration assistance
- Assistance with power outages and storm-related network damage

CEN: 287 Connections, 169 Cities and Towns



Colleges and Universities:
47 Connections

Public Institutions of Higher Education

Connecticut State University System: All Campuses

University of Connecticut: All Campuses.

Charter Oak State College: All

Community Technical Colleges: 10 out of 12

(Remaining two likely to remain with current connections)

Private Institutions of Higher Education

All non-profit higher education connections now have connections to the CEN, including Yale University, Wesleyan University, Trinity College, Fairfield University, the University of Bridgeport, Sacred Heart College and other private institutions.



Public Libraries:
31 Connections

To date, 31 public libraries are directly connected to CEN.

140 libraries are targeted for connection to CEN by the summer of 2006.



K-12:
215 Connections

Local K-12 School Districts

Optical connections to the CEN are now active in all school districts. Individual schools connect to the CEN through these district connections.

In a growing number of towns, districts have leveraged state infrastructure grant funds to connect individual schools. This approach alone has extended CEN to more than 150 additional school buildings.

Regional Technical High Schools

CEN connections have been provided to 19 of the state's Regional Technical High Schools.

Regional Education Service Centers

Connections have been provided for all six of the state Regional Education Service Centers. These centers collectively serve 160 school districts. Connections to these sites have greatly improved capacity for inter-district collaboration, video conferencing, and technology consolidation.

Online Content Support and Assistance

DOIT is working in partnership and under the direction of the Commission for Educational Technology (CET) on the development of online educational resources and applications to ensure CEN being put to its highest and best use.

The Commission serves as principal educational technology policy advisor for state government, and is charged with executing state-wide educational technology goals.

Activities in 2005

- In 2005, the Commission for Educational Technology launched www.cen.ct.gov for CEN users. DOIT provided technical assistance in the establishment of this site.
- The site includes links to online lesson plans and activities for teachers, including internet-based lessons, and professional development tools. Students can access online homework help, geography challenges and more.
- On www.cen.ct.gov, parents can access online resources help prepare their children for kindergarten and to help their children become better readers.
- DOIT is also working to secure a program manager to execute the strategic goals of the Commission for Educational Technology. A new position title is currently pending at the Department of Administrative Services.



Online Safety

Online Safety in Spotlight

Online safety is in the forefront as highly publicized cases of online dangers faced by children captured headlines in 2005 and early 2006.

Forty-five percent of children in the United States – including 30 million under the age of 18 – use the internet.

In 2005, DOIT launched www.ct.gov/cybersafe in response to the need for online safety awareness. The site, also linked to from www.cen.ct.gov, prominently features resources for parents, teachers and students to help them learn how to stay safe online.

DOIT also issued a payroll stuffer in October 2005 to publicize the site with an emphasis on identity theft.

Governor Rell has provided significant assistance in promoting online safety awareness, including two news releases and the planned taping of a cable access segment, with DOIT and the State Police, dedicated to this topic.



Welcome to CT.Gov/Cybersafe

CT.Gov/Cybersafe was launched by Governor M. Jodi Rell in October 2005 to help residents learn more about using the internet safely and responsibly. It is maintained and offered as public service by the State of Connecticut Department of Information Technology. We hope you find CT.Gov/Cybersafe a useful tool to stay safe online.

Getting Started

[How Safe Are You? Take the Cyber-Security Quiz!](#)

[Top Eight Cyber-Security Practices](#)

["Online Lingo" - Know What Your Kids Are Saying Online](#)

Resources for Parents, Educators and Students

[Internet Keep Safe Coalition: IkeepSafe.org](http://www.ikkeepsafe.org)

This website teaches children to safely navigate the Internet through a virtual playground with Faux Paw the Technocat. It also includes storybooks, an animated video download, and educational games. [Educational materials](#) including worksheets and tests are also available for parents and educators.

[National Center for Missing & Exploited Children - "Don't Believe the Type"](#)

The Center has published a site on the topic of online dangers, including a section for parents and guardians on "What to Watch for and What To Know." The site also includes a special section for teens, and an online game called "ID The Creep" to raise awareness of the dangers on online chat rooms, instant messaging and more.

[National Center for Missing & Exploited Children - Netsmartz](#)

Netsmartz was created by the National Center for Missing & Exploited Children and Boys & Girls Clubs of America. It offers a wide variety of additional resources including the ["online lingo" guide](#) for parents to